

UNIVERSITI TEKNOLOGI MARA

**THE EFFECTIVENESS OF ARBUSCULAR
MYCORRHIZAL FUNGI INOCULATION
ON GROWTH PERFORMANCE OF
COCOA (*Theobroma cacao* L) SEEDLINGS**

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Final year project report submitted in a partial fulfilment of the
requirements for degree of
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Management**

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ABSTRACT

A polybag experiment was conducted under rain shelter to evaluate the growth performance of *Theobroma cacao* seedlings with inoculation of arbuscular mycorrhizal fungi and to identify the different level of arbuscular mycorrhizal fungi in the growth performance of cocoa seedling. Cocoa seedling of hybrid UIT1 x Na32 was used and was inoculated with different rate of mycorrhiza which is 15g, 30g, 45g, 60g, 75g, and 90g and uninoculated as a negative control and 5g of CIRP as a positive control. The experiment was a single factor experiment arranged in a completely randomized design with four replications. Of the eight treatment used, plants inoculated with 90g of mycorrhiza gave more pronounced and significant vegetative growth. Maximum plant height, no. of leaves, stem diameter, fresh root and dry root weight of 51.8cm, 46.8, 13.3mm, 123.6g, and 50.1g respectively were obtained from seedling inoculated with 90g of arbuscular mycorrhiza.

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